NOVA SCOTIA

Department of Health

3rd Edition December 2004

106-05068/

Nova Scotia Department of Health
Data Catalogue

December 2004

Prepared by:

Information Analysis and Reporting
Information Management Branch

For additional copies contact:

Barb Harvie
Box 488
Halifax, NS
B3J 2R8

(902) 424-0972

Table of Contents

Introduction i

Department of Health Administrative Databases (By Branch) .. 1

Population Health and Primary Care 2
- Cardiac Arrest Intubation Database 3
- Paramedic Registration Database 4
- Computer Aided Dispatch Database 5
- Addiction Services 6
- Public Health - Enhanced Vision Screening Program 7

Financial Services Branch 8
- Reciprocal Billing 9
- Canadian MIS Database 10
- Management Information Systems 11

Information Management Branch 12
- Discharge Abstract Database 13
- National Ambulatory Care Reporting System 14
- Comparable Health and Health System Indicators 15
- Medicare 16

Mental Health and Insured Services 17
- Denticare 18
- Health Card Registration 19
- Mental Health - Outpatient Information System 20
- Pharmacare 21

Provincial Programs and Registries 22
- Diabetes Care Program of Nova Scotia 23
- National Diabetes Surveillance System (NDSS) Nova Scotia Database 24

Cardiac Advisory Council / Improving Cardiovascular Outcomes in Nova Scotia 25
Multi-organ Transplant Program 26
Nova Scotia Cancer Registry 27
Nova Scotia Breast Screening Program 28
Nova Scotia Gynaecological Cancer Screening Program ... 29
Reproductive Care Program (RCP) - H.B. Atlee Perinatal .. 30

Medical Officer of Health 31
Anonymous HIV Test Site 32
Hepatitis C and HIV/AIDS 33
Notifiable Disease Registry 34

Department of Health Survey Databases 35
Infant Feeding Survey 36
Nova Scotia School Drug Survey 37

Other Data on the Health of Nova Scotians 38
Canadian Hospital Injury Reporting and Prevention Program 39
Canadian Study of Health and Aging 40
CIVIC/ACCORD 41
Healthy Heart Healthy Brain (H_3B) Core + Add-on 42
Health Indicators 43
National Population Health Survey 44
Canadian Community Health Survey 45
Vital Statistics: Registry of Births, Deaths and Marriages .. 46
Canadian Tobacco Use Monitoring Survey 47

Appendices 48
Appendix A: Contact Addresses 48
Appendix B: Database Fields 49
Appendix C: Population Health Research Unit 51
Use of PHRU's Services 51

Introduction

This catalogue is designed to provide information about databases associated with the Nova Scotia health care system. The Department of Health maintains several of these databases, and, other organizations also hold important information sources. An overview of the types of information they contain, time periods covered, access processes, and whether there are regular reports associated with the database are included.

The information is presented in four main sections: Department of Health Administrative Databases organized by Branch, Departmental Survey Databases, Miscellaneous Databases, and Other Health Care System Databases.

- Department of Health Administrative Databases are used by those in the health care field to assess the use of specific services, help predict the need for services in the future, monitor the health of the population over time, assist in business planning, and to audit the money spent on health services in the province.

- Department of Health Survey Databases are separate databases generated by surveys that have been conducted by or for the Department. These tend to provide a snapshot of specific health indicators and health status measures.

- Miscellaneous Databases are other sources of data about the health of Nova Scotians, created and/or maintained by other government agencies (Statistics Canada) or not-for-profit organizations (Canadian Institute for Health Information), or compiled for special projects.

- Other Health Care System Databases are those databases created and housed by others in the health care system that track service

utilization and health statistics on an ongoing basis.

Time frames are given for when data collection began; however, concerns may arise regarding the quality and consistency of data. The type and amount of data collected in the beginning of a program/project can be different from that collected as time goes on, especially if the data have been collected over many years.

Department of Health Administrative Databases (By Branch)

Purpose: Track resource utilization for budget and service planning, as well as provide information for population health indicators and health status measures.

Population Health and Primary Care

Database	**Cardiac Arrest Intubation Database (CAINT)** **(formerly "CodeStat")**
Time Frame	2003 to Present.
Purpose	This database holds all information regarding Out-of-Hospital Cardiac Arrests (Out-of-Hospital Cardiac Arrest is defined as any patient who has no pulse and is not breathing in the pre-hospital setting) and attempted intubations
Brief Description of Contents	Cardiac Arrest PCRs are securely faxed to the EHSNS Burnside office within 24 hours of the event's occurrence, read for errors, and entered into CAINT manually. This data set and three others form the backbone of EHSNS reporting and its supporting data and information system.
Who, Where and How...	Source: Cardiac Arrest Patient Care Reports (PCRs) Owner: Emergency Health Services Nova Scotia, Department of Health (DoH) Custodian: Emergency Health Services Nova Scotia, DoH Contact: Research and Statistics Officer, Medical Oversight, Emergency Health Services (Burnside Office), DoH
Reports	This database is linked with the QA Database, Computer Aided Dispatch Database (CAD), and Paramedic Registry Database to produce reports on Survival of Out-of-Hospital Cardiac Arrests, Utstein Flow Diagrams, Provincial and Regional Comparisons of Cardiac Arrest Rates, etc. via the QA Reportgenerator as well as reports on endotracheal intubations.
Comments	much better than the previous database (Codestat).

Database	**Paramedic Registration Database**
Time Frame	1999 to Present.
Purpose	The registration database exists primarily to house all demographic and registration level information on paramedics.
Brief Description of Contents	All demographic and certification related information on currently registered paramedics serving within the Emergency Health Services Nova Scotia pre-hospital health care system. Fields include: name, address, paramedic identification number, and level of training (i.e. P-I, II, III, EMD, or CCP).
Who, Where and How...	Source: Paramedic Registrations Owner: Emergency Health Services Nova Scotia, Department of Health (DoH) Custodian: Emergency Health Services Nova Scotia, DoH Contact: Registrar, Emergency Health Services (Bedford Office), DoH
Reports	Reports the status of paramedics' registrations, as well as their on-going training. Linked with the QA Database, Computer Aided Dispatch Database (CAD), and CodeStat® Cardiac Arrest Database to produce reports on Intubation success by Paramedics, IV Access by Paramedics, Medication Usage, Intubation by Paramedic Level, etc. via the QA Reportgenerator.

Database	**Computer Aided Dispatch Database (CAD)**
Time Frame	1999 to Present.
Purpose	The CAD primarily aids in the dispatch of emergency vehicles and personnel (assets) where needed in Nova Scotia as well as providing scripted instructions for management of medical emergencies.
Brief Description of Contents	This database holds all the information from all dispatched calls for the entire EHS pre-hospital care system. It assigns each call a Master Incident Number (MIN), records and time stamps the system's operations, including: chief complaint of the patient(s), location of the call, times to the scene, patient, departure, and arrival at hospital. EHS receives quarterly reports as well as data 'dumps' which, in linking with other EHS data sets, provide the back bone for our continuous quality reporting.
Who, Where and How...	Source: 911-E (ANI/ALI) and Direct Calls Owner: Emergency Health Services Nova Scotia, Department of Health (DoH) Custodian: Emergency Medical Care, Inc. Contact: Del Kenley, Emergency Medical Care, Inc.
Reports	The CAD produces operational reports including several that are used to measure compliance of the ground ambulance contractor with the performance contract. It also provides data for the Medical Director's Dispatch QA Quarterly Reports. The CAD database is linked with the QA Database, Cardiac Arrest and Intubation (CAINT) Database, and Paramedic Registry Database to produce reports, including: the Continuous Quality Improvement (CQI) flow-chart via the QA Reportgenerator.
Comments	Has the ability to track outbreaks of specific medical complaints essentially in real time.

Database	**Addiction Services**
Time Frame	Beginning in 1990, with varying levels of data collection.
Purpose	Reports on client use of programs and services in each of the DHA's.
Brief Description of Contents	Basic demographic information such as client ID, address, birth date, gender, and health card number, as well as clinical information such as ongoing assessments and service information (type of treatment program and type of addiction).
Who, Where and How...	Source: Intake workers Owner: Department of Health (DoH) Custodian: Capital District, Addiction Prevention and Treatment Services Access: Contact Director Addiction Services in each DHA
Reports	Quarterly and annual reports.
Comments	Regional information is uploaded to Capital District office (Dartmouth) where complete information is stored.

Database	**Public Health - Enhanced Vision Screening Program (EVSP)**
Time Frame	Will be collected from 2004 onward.
Purpose	Records vision testing results for pre-school children at school entry and tracks referred children.
Brief Description of Contents	Basic demographic information such as client ID, address, birth date, gender, and health card number as well as screening results and follow up information.
Who, Where and How...	Source: Public Health Nurses Owner: Office of Health Promotion Custodian: Public Health Access: Contact Health Enhancement Coordinator, Public Health
Reports	To be determined.
Comments	Written records data 1986 - 1996. Data from 1997 - 2004 does not exist.

Financial Services Branch

Database	**Reciprocal Billing (Hospital services)**
Time Frame	1989 to present.
Purpose	Tracks financial payments for hospital and medical services provided to Nova Scotia residents treated outside the province and country as well as recording the treatment of nonresidents at Nova Scotia hospitals.
Brief Description of Contents	Basic patient and provider information such as client ID, address, birth date, gender, and health card number as well as procedures, hospital services, costs, etc.
Who, Where and How...	Source: Hospital claims Owner: Department of Health (DoH) Custodian: Revenue Recovery Section, DoH Access: Contact Director, Revenue Recovery, DoH
Reports	Annual reports.

Database	**Canadian MIS Database** **(formerly "Annual Hospital Survey")**
Time Frame	1932 to present.
Purpose	Financial, statistical and operational data for health service organizations.
Brief Description of Contents	An integrated database of financial, statistical, and operational activity of health service organizations in Nova Scotia. The information is reported by service area. The financial data contained in these returns is post-audit and includes balance sheet information.
Who, Where and How...	Source: District Health Authorities & IWK Health Centre Owner: Statistics Canada Custodian: CIHI, Ottawa Access: MIS Advisor, Financial Services Department of Health
Reports	Specialized reports currently available from CIHI for a fee. See CIHI catalogue or website http://www.cihi.ca/ for details.
Comments	Data flows from the DHAs and IWK to the DoH MIS Database to CIHI.

Database	**Management Information Systems (MIS)**
Time Frame	2001/2002 Fiscal Year to present
Purpose	Provides an integrated approach to managing financial, statistical and operational activity related to the operations of health service organizations. Information is reported at a functional centre level, to be used for budgeting and planning purposes, assessing and monitoring health care expenditures to improve the effectiveness and efficiency of health service organizations through better information and measures of productivity.
Brief Description of Contents	Provides detailed financial and statistical data on the nine District Health Authorities and the IWK. The database is based on CIHI's MIS Guidelines and will populate their Annual Hospital Survey.
Who, Where and How...	Source: District Health Authorities & the IWK Owner: Department of Health (DoH) Custodian: Financial Services, DoH Contact: MIS Advisor
Reports	Reporting of Corporate Health Indicators; Provincial Comparative Service Reports, Budget to Actual Variance Analyses, Performance Indicators, Service Costing, Human Resource Worked and Benefit Hours and Costs, etc.
Comments	This is a re-developed version of the old MIS Form-12 Semi-Annual Reporting System. The web based database includes edit checks for data quality, and quarterly data submissions of financial/statistical accounts by month of the fiscal year.

Information Management Branch

Database	**Discharge Abstract Database (DAD)** **(Inpatient and Day Surgery Hospital)**
Time Frame	DAD system: April 1995 to present. A/S/D system: October 1991 - March 1995. A/S system: 1979 - September 1991. HIC system: 1970-78.
Purpose	Tracks hospital utilization by reporting on inpatient and day surgery hospitalizations.
Brief Description of Contents	Basic demographic information such as client ID, address, birth date, gender, and health card number, as well as hospital of treatment, diagnoses and procedures, length of stay, admission category, CMG, RIW etc. See appendix for a more detailed list of data fields.
Who, Where and How...	Source: Hospitals Owner: Department of Health (DoH) Custodian: Canadian Institute for Health Information (CIHI) Access: Written requests to Director, Information Analysis and Reporting, DoH
Comments	Data are used for multiple quarterly and annual reports on hospital services utilization and health care indicators.

Database	**National Ambulatory Care Reporting System (NACRS)** **(Emergency Room and Ambulatory Hospital Data)**
Time Frame	IWK fiscal 2003/04 and DHA 1 October 2003 to March 31, 2004
Purpose	Tracks hospital-based ambulatory care by reporting on demographic data, clinical data, administrative data, financial data and service-specific data elements for day surgery, emergency and ambulatory clinics.
Brief Description of Contents	Basic demographic information such as health card number, postal code, residence code, gender, birth date, MIS functional centre, highest level of education, as well as hospital treatment such as arrival date and time, triage date and time, decision to admit date and time, main problem, intervention, disposition and service provider, etc. See appendix for a more detailed list of data fields.
Who, Where and How...	Source: Hospitals Owner: Department of Health (DoH) Custodian: Canadian Institute for Health Information (CIHI) Access: Written requests to Director, Information Analysis and Reporting, DoH
Comments	Currently, data submission to NACRS has been mandated in Ontario for ER, Day Surgery, Dialysis, Cardiac Catheterization and Oncology. Some facilities in B.C., the Yukon, P.E.I and Nova Scotia are also submitting data.

Database	**Comparable Health and Health System Indicators**
Time Frame	Bi-annual Federal/Provincial/Territorial initiative on comparable health and health system reporting to the public
Purpose	Directed by the First Ministers' Accords of 2001 & 2003, comparable reporting on health and health system indicators across the country. Provinces, territories, Health Canada, Statistics Canada and Canadian Institute of Health Information work together to identify a set of common, comparable indicators for each jurisdiction to report on to its public. Provides common indicators of health status and health system performance in each jurisdiction.
Brief Description of Contents	2002: 67 indicators thematically grouped by Health Status (life expectancy, infant mortality, etc) Health Outcomes (mortality, incidence, survival, disease incidence) Quality of Service (access to 24/7 care, patient satisfaction) 2004: 125 indicators thematically grouped by Primary Health Care, Home Care, Catastrophic Drugs, Diagnostic & Medical Equipment, Healthy Canadians, Health Human Resources. Includes many of the original 67 areas plus new indicators and indicator areas.
Who, Where and How...	Data Source: Statistics Canada, CIHI, Health Canada, NS data - Cancer Care Nova Scotia, Cardiac Care, Home Care Report Source: NSDoH Owner: Report: NSDoH Data: Original data sources Custodian: Report: NSDoH Central Sites: CIHI, Stats Can Access: Public Access
Reports	Central Data Sites: http://www.statcan.ca/english/freepub/82-401-XIE/2002000/index.htm http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=prtwg_2004_e Nova Scotia Reports: 2002: http://www.gov.ns.ca/health/pirc/Default.htm 2004: http://www.gov.ns.ca/health/reports.htm#measure
Comments	Data Sites provide comparable data from other jurisdictions. Free public access. Data currency dependant on data source. Nova Scotia 2004 Reports & 2002 Highlight reports are intended for broad public readership and information.

Database	**Medicare**
Time Frame	New MSI Information System began in July 1996 as the previous mainframe system was phased out. Some patient history (back to 1988) information exists in the new system*.
Purpose	Database of medical service claims.
Brief Description of Contents	Each insured service performed by a physician, optometrist or prosthetist is captured. The service provided, diagnosis code, service location, date, provider information, payment information, payment responsibility and beneficiary demographics are recorded. Provider information includes client ID, type, number, age, address, payment amounts and types, services performed, and business arrangements.
Who, Where and How...	Source: Physician/optometrist/prosthetist claims Owner: Department of Health (DoH) Custodian: Atlantic Blue Cross Care (ABCC) Access: Written requests to Twyla Taylor, ABCC
Comments	*Data storage and retrieval systems have changed over time and access to historical data may be cumbersome. Data subsets include information on alternate funding arrangements and an MSI provider list.

Mental Health and Insured Services

Database	**Denticare**
Time Frame	1988* to present.
Purpose	Tracks claims for children's oral health and dental surgery services.
Brief Description of Contents	Dentist's ID, address, gender, amount paid by service codes, number of services and units, remuneration method, etc.
Who, Where and How...	Source: Dentist and dental surgeon claims Owner: Department of Health (DoH) Custodian: Atlantic Blue Cross Care (ABCC)/Quikcard Access: Written requests to Twyla Taylor, ABCC
Reports	Regular and ad hoc reports.
Comments	*Data storage and retrieval systems have changed over time and access to historical data may be cumbersome.

Database	**Health Card Registration**
Time Frame	New Health Card numbers were issued beginning in April 1994 and the new Registration System came online in September 1995.
Purpose	Maintains a list of Nova Scotia residents who are eligible* for insured health care services (Medicare, Pharmacare, Denticare, etc.). Identifies insured individuals and tracks beneficiary movement throughout the province.
Brief Description of Contents	Basic demographic information such as client ID, address, birth date, gender, health card number and status, program eligibility (medicare, optometry, seniors & community services pharmacare, denticare, prosthetics) and organ donor status information.
Who, Where and How...	Source: Eligible* Nova Scotian residents Owner: Department of Health (DoH) Custodian: Atlantic Blue Cross Care (ABCC) Access: Written requests to Twyla Taylor, ABCC
Comments	*Does not include 100% of Nova Scotian population: e.g. RCMP and Armed Forces personnel are excluded. The health card number provides a unique lifetime identifier used whenever insured health care services are provided.

Database	**Mental Health - Outpatient Information System (MHOIS)**	
Time Frame	1993/94 to present.	
Purpose	Tracks the client use of mental health outpatient services to measure client-service needs and program priorities.	
Brief Description of Contents	Basic demographic information such as client ID, address, birth date, gender, and health card number as well as information about their health care services, specialty care provider, diagnoses, treatments and the episodes of care.	
Who, Where and How...	Source:	Clinicians (Primarily nurses, social workers, psychologists, psychiatrists, occupational therapists)
	Owner:	Department of Health (DoH)
	Custodian:	Information Technology Section, DoH
	Access:	Director, Mental Health, DoH
Reports	Web based Cognos reporting for authorized users.	

Database	**Pharmacare**
Time Frame	Mainframe 1974 - 1994*. New online Pharmacare system from January 1995. Records of claims back to 1991/92 have been converted and uploaded to the new system.
Purpose	Tracks financial claims for prescription medications for seniors, specific Department of Community Services clients, Cancer Society patients, as well as specific drug usage for these groups.
Brief Description of Contents	Information collected includes the Drug Identification Number (DIN), Anatomical Therapeutic Class Code, drug class, drug name, quantity, program involved with, date dispensed, date provider paid, prescriber, pharmacy, beneficiary demographics, generic or brand drug, trial DIN, refills allowed, days supply, drug cost, dispensing fees, co-payment arrangements, and exception drug information.
Who, Where and How...	Source: Pharmacist's claims Owner: Department of Health (DoH) Custodian: Atlantic Blue Cross Care (ABCC) Access: Written requests to Twyla Taylor, ABCC
Reports	Regular and ad hoc reports.
Comments	*Data storage and retrieval systems have changed over time and access to historical data may be cumbersome.

Provincial Programs and Registries

Database **Diabetes Care Program of Nova Scotia (DCPNS) Registry**

Time Frame April 1, 1994 to present.

Purpose

- To help determine the magnitude of diabetes mellitus and its related complications in Nova Scotia,
- To provide useful information to the Diabetes Centres (DC) staff, referring physicians, and district/facility administration,
- to allow for limited cross comparisons and an overview of provincial trends and practices in efforts to discover and apply best/better practice approaches.

Brief Description of Contents

- All new referrals to DCs since April 1, 1994,
- Information on follow-up cases prior to 1994 for DCs using the on-site registry,
- Newly diagnosed cases of diabetes in children < age 19 since 1992,
- IWK Health Centre Pregnancy and Diabetes Program data (new referrals from 1995-present),
- All DCs monthly statistics since 1998/99, (monthly statistics from 1992/93 to 1998/99 are housed in a separate database)
- Indicators of care (see attachment) on going collection for those DCs using onsite registry.

Who, Where and How...

Source: Diabetes Care Centres in the DHAs

Owner: Diabetes Care Program of Nova Scotia & District Health Authorities

Custodian: Diabetes Care Program of Nova Scotia

Access:

- Through the DCPNS Data Access Policy and Procedure.
- Written requests to Coordinator (policy and application available on the DCPNS web-site http://www.diabetescareprogram.ns.ca).

Database **National Diabetes Surveillance System (NDSS) Nova Scotia Database**

Time Frame 1995/1996 to 2001/2002.

Purpose A nationally (Health Canada) standardized database created to facilitate diabetes surveillance and the monitoring of diabetes-related complications across provinces and territories

Brief Description of Contents

- Incorporates provincial medicare registries, hospital discharge records and physician billings data
- Identifies the population with diabetes
- Flags diabetes-related complications and procedures for the Nova Scotia population as a whole
- Summarizes health services utilizations measures for the Nova Scotia population, such as the number and cost of physician visits, and total days care in hospital
- Retains individual's health card numbers allowing the database to be linked to other sources of data

Who, Where and How...

Source:	Nova Scotia medicare registry, hospital discharge and physician billing data
Owner:	Diabetes Care Program of Nova Scotia
Custodian:	Diabetes Care Program of Nova Scotia & Population Health Research Unit, CH&E, Dalhousie University
Access:	Through the DCPNS Data Access Policy and Procedure.

Database	**Cardiac Advisory Council / Improving Cardiovascular Outcomes in Nova Scotia (ICONS)**
Time Frame	February 1997 to present.
Purpose	The Cardiac Advisory Council is a provincial program with mission to improve cardiovascular health and care in Nova Scotia. ICONS was a research project focussing on measuring and improving the quality of care provided to Nova Scotians with cardiovascular disease. ICONS's data are available at the Cardiac Advisory Council.
Brief Description of Contents	Information collected on all admissions in Nova Scotia for acute myocardial infarction, congestive heart failure and unstable angina. Basic demographic information such as client ID, address, birth date, and gender as well as clinical data such as diagnosis, treatment, outcomes, etc.
Who, Where and How...	Source: Patient records Owner: Department of Health Custodian: Capital District Health Authority Access: Program Manager, Cardiac Advisory Council

Database	**Multi-organ Transplant Program**	
Time Frame	1969 to present.	
Purpose	Contains statistics about medical treatment, waiting times, and outcomes for kidney, liver and heart transplant patients.	
Brief Description of Contents	Basic demographic information (donor and recipient), procedures, treatment, and outcomes, etc.	
Who, Where and How...	Source:	Capital District Health Authority (CDHA)
	Owner:	CDHA
	Custodian:	Multiple Organ Transplant Program, CDHA
	Access:	Coordinator, Multiple Organ Transplant Program, CDHA

Database	**Nova Scotia Cancer Registry**
Time Frame	1970* to present.
Purpose	Contains information on all Nova Scotians diagnosed with cancer. Data is used to produce descriptive cancer statistics for Nova Scotia, support cancer epidemiology work and approved research.
Brief Description of Contents	Person oriented database that includes: Basic demographic information (e.g. Client ID, names, address at diagnosis, birth date, gender, health card number) as well as Disease information (e.g. diagnosis date, method of diagnosis, disease site, disease stage) Mortality data (e.g. date of death, cause of death) Primary Cancer Treatment Data (e.g. type of treatment, dates of treatment)
Who, Where and How...	Source: Hospital Health Information Departments, Nova Scotia Vital Statistics, Hospital Laboratories (e.g. Pathology, Cytology), Provincial Cancer Centers in Halifax and Sydney Owner: Nova Scotia Department of Health/Cancer Care Nova Scotia Custodian: Surveillance & Epidemiology Unit, Cancer Care Nova Scotia Access: Director, Surveillance & Epidemiology Unit, Cancer Care Nova Scotia
Reports	Nova Scotia Cancer Registry: Annual Incidence Reports. Canadian Cancer Registry: Annual Report and Statistical Tables. Cancer In North America, Annual Report WHO: Cancer Incidence Report on Five Continents (periodically).
Comments	*Information was collected as far back as the 1950s, but prior to 1970 the data are incomplete.

Database	**Nova Scotia Breast Screening Program**	
Time Frame	June 1991.	
Purpose	Contains statistics regarding breast screening results from the Nova Scotia Breast Screening Program (three mobile vans and one metro clinic).	
Brief Description of Contents	Basic demographic information such as client ID, address, birth date, gender, and health card number as well as screening site, screening, results and follow up, and patient report.	
Who, Where and How...	Source:	Client data
	Owner:	Department of Health (DoH)
	Custodian:	Nova Scotia Breast Screening Program
	Access:	Coordinator, Nova Scotia Breast Screening Program

Database	**Nova Scotia Gynaecological Cancer Screening Program**
Time Frame	Data collection with manual and electronic input began in May 1978.
Purpose	Contains information on all PAP tests.
Brief Description of Contents	Basic demographic information such as client ID, postal code, birth date, and health card number, as well as which laboratory and physician was involved, prior history, test results, and recommendations.
Who, Where and How...	Source: Seven cytology laboratories and colposcopy sites Owner: Department of Health Custodian: Cancer Care Nova Scotia, Margery MacIsaac Access: Cancer Care Nova Scotia, Margery MacIsaac
Reports	1997 Annual report. Other reports forthcoming.

Database	**Reproductive Care Program (RCP) - H.B. Atlee Perinatal Database**
Time Frame	1988 to present for Nova Scotia residents, women who delivered in NS or infants delivered in NS.
Purpose	• To assist with the development and monitoring of standards of care. • To provide health care professionals and health care administrators with information required for surveillance of key health outcomes or specific clinical issues. • To facilitate comparison of clinical indicators among groups of like heath care facilities or across geographic areas of the province. • To assist with facility-level peer review activities. • To focus programs in continuing professional education. • To contribute to research related to perinatal care and outcomes.
Brief Description of Contents	Basic demographic data (e.g. unique ID, health card number birth date), behaviour and lifestyle information (e.g. smoking), labour and birth data, health outcomes, and information about maternal and infant diseases and procedures (e.g. pregnancy complications, congenital).
Who, Where and How...	Source: Hospitals Owner: Nova Scotia health care facilities responsible and accountable for data use. Custodian: Reproductive Care Program (RCP) Access: Written requests to Coordinator, RCP
Reports	Produces Annual reports and periodic reports for participating facilities. Specialized requests for aggregate data available following written request to RCP Co-ordinator. Requests may be submitted electronically via form on RCP website: http://rcp.nshealth.ca Other requests (e.g. database linkages) require additional authorization.

Medical Officer of Health

Database	**Anonymous HIV Test Site**	
Time Frame	June 1994 to present.	
Purpose	Records questionnaire data of Nova Scotians requesting anonymous testing for HIV/AIDS as per HIV Reporting and Testing regulations to the Health Act.	
Brief Description of Contents	Basic demographic information such as county of residence, birth year, and gender, as well as behavioural risk factors, reasons for testing, test history, results, and suggested community services contacts.	
Who, Where and How...	Source:	Survey data from Planned Parenthood Metro Clinic
	Owner:	Department of Health (DoH)
	Custodian:	Provincial Medical Officer (Dr. J. Scott)
	Access:	Provincial Medical Officer (Dr. J. Scott)

Database	**Hepatitis C and HIV /AIDS**	
Time Frame	Hepatitis C: Fall 1994 to present. HIV Infection/AIDS: January 1983 to present.	
Purpose	Surveillance for Hepatitis C and HIV/AIDS as per Notifiable Diseases responsibilities under the Health Act	
Brief Description of Contents	Basic demographic information as well as risk factors, and date reported.	
Who, Where and How...	Source:	Regional Public Health Offices and Physicians
	Owner:	Department of Health (DoH)
	Custodian:	Provincial Medical Officer (Dr. J. Scott)
	Access:	Provincial Medical Officer (Dr. J. Scott)
Reports	Annual Hepatitis C report; Annual HIV/AIDS	

Database	**Notifiable Disease Registry**	
Time Frame	1983 to present.	
Purpose	Records incidence of communicable diseases (such as measles, mumps, food poisoning, sexually transmitted diseases, etc.) that must be reported to the Department under *Health Act* legislation.	
Brief Description of Contents	Basic demographic information such as address (county ± municipality), age, gender, diagnosis, and date reported.	
Who, Where and How...	Source:	Laboratory confirmed reports/Regional Public Health Offices
	Owner:	Department of Health (DoH)
	Custodian:	Provincial Medical Officer (Dr. J. Scott)
	Access:	Provincial Medical Officer (Dr. J. Scott)
Reports	Annual Surveillance Reports.	
Comments	Also used to report nationally notifiable diseases to Health Canada.	

Department of Health Survey Databases

Database	**Infant Feeding Survey**
Time Frame	Spring 1992 and 1994.
Purpose	Investigate breastfeeding habits of mothers with babies 0 to 5 months of age.
Brief Description of Contents	Basic demographic information such as client ID, address, birth date and health card number as well as infant feeding history; breastfeeding information including intent, barriers, and practices; lifestyle risk behaviours; prenatal attendance; baby information; number of siblings, etc.
Who, Where and How...	Source: Survey participants Owner: Department of Health (DoH) Custodian: Public Health and Health Promotion Section, DoH Access: Director, Public Health and Health Promotion, DoH
Reports	A highlight document, a discussion document, and a technical report were released in 1998.
Comments	The intention is to do periodic surveys. The time frame is yet to be determined.

Database	**Nova Scotia School Drug Survey**
Time Frame	Standardized questionnaire in 1996, 1998, 2002. Other surveys have been done approximately every 5 years since the 1960's.
Purpose	Provide estimates of rates of use of alcohol, tobacco, cannabis and other drug use among junior and senior high school students.
Brief Description of Contents	Anonymous self-reported use of licit and illicit drugs, demographics, school performance, problems with drug use, and sexual activity. An open-ended question(s) allows students to enter other information in their own words.
Who, Where and How...	Source: Survey participants Owner: Department of Health (DoH) Custodian: Community Health & Epidemiology, Dalhousie University Access: Director, Drug Dependency Services, DoH
Reports	Nova Scotia Student Drug Use 1996 Nova Scotia Student Drug Use 1998 Nova Scotia Student Drug Use 2002
Comments	The Standardized Student Drug Use Survey instrument is used by all four Atlantic Provinces allowing interprovincial comparisons.

Other Data on the Health of Nova Scotians

Database	**Canadian Hospital Injury Reporting and Prevention Program (CHIRPP)**	
Time Frame	1990	
Purpose	Surveillance of childhood injuries presented in Emergency Department at the IWK Health Centre. In total, 15 centres across Canada collect data (10 pediatric/5 general hospitals).	
Brief Description of Contents	Basic demographic information such as name, address, birth date, and gender, description of injuries and how the injury occurred. This database has its own coding system.	
Who, Where and How...	Source:	15 Canadian Hospitals (primarily pediatric)
	Owner:	IWK Health Centre (each hospital owns their own data)
	Custodian:	IWK Health Centre
	Access:	CHIRPP Information Officer at IWK Health Centre.

Database **Canadian Study of Health and Aging (CSHA)**

Time Frame February 1991 - December 2001: 3 cycles completed

Purpose Longitudinal, population-based study which allows researchers to understand the clinical course of cognitive decline. Addresses the prevalence of cognitive impairment and cognitive loss that does not meet the criteria for dementia. The data was collected from 10,263 people, over the age of 65, who were followed up every five years until the completion of CSHA-3 in December 2001.

Brief Description of Contents Captured information on measures of cognitive impairment and cognitive loss that did not meet criteria for dementia. Additional measures including functional impairment, emotional dysfunction, executive dysfunction, and social support were collected.

Who, Where and How...

Source:	Randomly selected participants from both the community (n=9008) and institutions (n=1255).
Owner:	Seniors' Independence Research Program
Custodian:	National Health Research and Development Program, Health Canada
Access:	Local contact: Dr. Kenneth Rockwood

Reports Dr. K. Rockwood has produced various research papers from the database. They range from prevalence, to symptoms and risk factors, as well as the use of home care services.

Database	**CIVIC/ACCORD (Consortium to Investigate Vascular Impairment of Cognition/ A Canadian Collaborative Cohort of Related Dementias)**
Time Frame	July 1996 to October 1998- baseline visit and two yearly follow-up visits.
Purpose	CIVIC - a longitudinal cohort study of patients aged 65 years and over with memory impairment in nine memory clinics across Canada selected to investigate vascular dementia. ACCORD - a longitudinal cohort study of subjects referred to eight Canadian dementia research centres for the evaluation of neurobehavioral symptoms suggesting dementia.
Brief Description of Contents	These studies parallelled each other in data collection except for a few research scales. The CIVIC study had a baseline cohort of 1347 subjects and the ACCORD a baseline cohort of 1066 subjects. Both cover a large range of dementia types with Alzheimer's Disease accounting for the largest proportion. Subjects in clinics across the country were assessed in great detail. The data was collected and a database was developed and statistically analysed.
Who, Where and How...	Source: Participants with memory problems, both in the community and in institutions. Owner: Dr. Kenneth Rockwood & Dr. Howard Feldman Custodian: Dr. Kenneth Rockwood, Halifax, NS & Dr. Howard Feldman, Vancouver, BC Access: Local contact: Dr. Kenneth Rockwood
Reports	Research papers continue to be published and are providing valuable information on dementia in Canada.

Database	**Healthy Heart Healthy Brain (H_3B) Core + Add-on**
Time Frame	September 2001- Present.
Purpose	To collect data and examine the associations of traditional and emerging cardiovascular risk factors with cognitive impairment and dementia; with cardiovascular and cerebrovascular disease; with other risk factors for cognitive impairment and dementia; and with each other.
Brief Description of Contents	Characterization at baseline; one cohort will have 15 year follow-up, the other 5-6 year follow-up. The study is comprised of a screening interview, neuropsychological testing and clinical examination. Recruitment of 777 participants in the 1986 NS Heart Health Survey; aged 40+; 1,946 participants in the 1995 NS Health Survey; aged 40+. Fundamental variables of the Survey include: current cognitive function (all participants to be screened), cardiovascular health (current, past), other health (current, past), selected family health history, medications (current and some past), lifestyle/risk factors, socio-demographic, blood tests, subset of participants, detailed neuropsychological testing, and a clinical examination performed by a geriatrician. Final diagnosis is established with a consensus conference by a geriatrician and a psychologist.
Who, Where and How...	Source: Community and institution Owner: Dalhousie University Custodian: Dr. Kathleen MacPherson Access: Dr. Kathleen MacPherson, QEII HSC
Comments	Initial contact with potential participants is through Dr. David MacLean (Heart Health Program Principal Investigator).

Database	**Health Indicators**
Time Frame	Produced bi-annually (spring, winter) by Statistics Canada and CIHI
Purpose	Contains a collection of national and provincial information Organized in a health indicator framework, which includes: Health of Canadians – e.g., mortality, health problems; Determinants of Health – e.g., smoking, exercise, income; Health system performance – e.g., hospital re-admissions; and community/health system characteristics Set of indicators and information is intended to provide high level comparisons between Statistics Canada defined Health Zones and peer groups.
Brief Description of Contents	Health status: life expectancy, potential years of life lost, mortality rates, morbidity rates, etc. Health determinants: population factors, fertility rates, births, smoking and drinking rates, exercise rates, etc. Health Resources and Utilization: health expenditures by category and sectors, number of professionals, bed occupancy rates, patient days, physician services, etc.
Who, Where and How...	Source: Various data sources Owner: Statistics Canada Custodian: Statistics Canada Access: Director, Information Analysis and Reporting, Department of Health
Reports	Located on the Internet at: http://www.statcan.ca/english/freepub/82-221-XIE/free.htm
Comments	Quickly and easily accessed but data are intended for high level comparisons between Statistics Canada peer groups. The appropriateness of peer group assignments may be questionable. Data are generally not current.

Database	**National Population Health Survey**
Time Frame	1994/95, 1996/97, 1998/99, 2002/03-household component
Purpose	Provide national and provincial health promotion information.
Brief Description of Contents	Longitudinal national survey on population health status, the use of health services, risk factors, demographic information and socio-economic status.
Who, Where and How...	Source: National survey results Owner: Statistics Canada Custodian: Statistics Canada Access: Written request to the Information Analysis and Reporting Section, Department of Health
Reports	Public use micro data file.
Comments	Approximately 1,100 Nova Scotians are included in this survey. Interprovincial comparisons are possible but there is no regional breakdown of data.

Database	**Canadian Community Health Survey**
Time Frame	2001 to 2003
Purpose	To provide timely cross-sectional estimates of health determinants, health status and health system utilization at a sub-provincial level.
Brief Description of Contents	National survey on health determinants, health status and health system utilization for 136 health regions across the country.
Who, Where and How...	Source: National survey results Owner: Statistics Canada Custodian: Statistics Canada Access: Written request to the Information Analysis and Reporting Section, Department of Health
Reports	Public use micro data file (released May 2002.)

Database	**Vital Statistics: Registry of Births, Deaths and Marriages**
Time Frame	Births, 1925 to present; Deaths, 1926 to present.
Purpose	Recording vital statistics such as marriages, births and deaths in the province.
Brief Description of Contents	Details of births, deaths, and marriages in Nova Scotia as well as next of kin information.
Who, Where and How...	Source: Birth, death and marriage registrations Owner: Service Nova Scotia and Municipal Relations (SNSMR) Custodian: Vital Statistics Section, SNSMR Access: Vital Statistics Section, SNSMR
Reports	Vital Statistics: *Annual Report*.
Comments	Health card number not on certificates prior to early 1990s but present on majority of death registrations since 1998. Old data slowly being added to computer files. Electronic information is stored in Ottawa. Department of Health has a copy of all death data since 1990.

Database	**Canadian Tobacco Use Monitoring Survey (CTUMS)**
Time Frame	February - June, July - December and Annual 1999, 2000, 2001, 2002, 2003.
Purpose	The Canadian Tobacco Use Monitoring Survey (CTUMS) has been conducted for Health Canada since 1999, and provides data on tobacco use and related issues. The primary objective of the survey is to track changes in smoking status, especially for populations most at risk, such as the 15 to 24 year olds. The survey allows Health Canada to estimate smoking prevalence by province-sex-age groups on a semi-annual basis.
Brief Description of Contents	National smoking rate age 15+ Smoking rate among youth (aged 15-19), young adults (20-24) Consumption Provincial smoking rates Quit smoking methods
Who, Where and How...	Source: Owner: Health Canada Custodian: Statistics Canada Access: For information on public use microdata files, contact Client Services at 1-888-297-7355; (613) 951-7355; fax (613) 951-3012), Special Surveys Division.
Reports	Health Canada: web-based postings of annual results, and fact sheets
Comments	Annual Data is now available for 1999, 2000, 2001, 2002 and 2003, from the Canadian Tobacco Use Monitoring Survey (CTUMS). This Health Canada survey, conducted by Statistics Canada, provides timely, reliable and continual data on tobacco use and related issues.

Appendices

Appendix A: Contact Addresses

Nova Scotia Government:
Nova Scotia Department of Health
P.O. Box 488
Halifax, N.S.
B3J 2R8

Switchboard: (902) 424-5818

Capital District Health Authority
Drug Dependency Services
3rd Simpson Hall
Dartmouth, N.S.
B2Y 3Z9

Phone: (902) 424-5623

Hospitals:
IWK Health Centre
5850/5980 University Avenue
P.O. Box 9700
Halifax, Nova Scotia
B3K 6R8

Switchboard: (902) 470-8888

QEII Health Sciences Centre
Capital District Health Authority
1278 Tower Road
Halifax, N.S.
B3H 2Y9

Switchboard: (902) 473-2700

Other:
CIHI Order Desk
200-377 Dalhousie St.
Ottawa, ON
K1N 9N8

Phone: (613) 241-7860

Atlantic Blue Cross Care (ABCC)/Quikcard
P.O. Box 2200
Halifax, N.S.
B3J 3C6

Phone: (902) 496-6624

Appendix B: Database Fields

Discharge Abstract Database - D.A.D.

Canadian Institute for Health Information (CIHI) Discharge Abstract Database - DAD for Inpatients, Day surgery and Chronic Rehabilitation Patients

Institution number, health card number, postal code, residence code, responsibility for payment code, birth date, age, gender, admission date and category, readmission code, discharge date, institution type, exit codes, patient service codes, weight for newborn and neonates, calculated length of stay, alternate level of care days, medical/surgical indicator, major clinical category (MCC), case mix group or day patient grouping (CMG or DPG), resource intensity weight (RIW), COPS physician number, most responsible diagnosis and up to twenty-four additional diagnoses and diagnosis types, principal intervention episode and intervention date, intervention provider's (s) number, anaesthetist and anaesthetic type, intervention location and up to 19 additional intervention episodes, special care unit codes, service transfers and days if any, abortion information, blood transfusions and special project fields defined by the Department of Health, CIHI, or individual hospitals including but not limited to lengths of stay on designated mental health units.

National Ambulatory Care Reporting System (NACRS)

Canadian Institute for Health Information (CIHI) National Ambulatory Care Reporting System (NACRS)

Facility number, health card number, postal code, residence code, gender, birth date, highest level of education, ambulatory registration number, responsibility for payment, MIS functional centre account code, visit type, arrival date and time, triage date and time, decision to admit date and time, prefix main problem, intervention code, duration and location, anaesthetic technique, date and time visit completed, out of hospital indicator, visit disposition, referred to, service provider and provider type, blood transfusion indicator, delivery/abortion information, Pediatric Canadian Triage Acuity Scale (PCTAS) indicator, seatbelt indicator, helmet indicator, special project fields, Major Ambulatory Cluster (MAC), Comprehensive Ambulatory Classification System (CACS), Ambulatory Cost Weight values (ACW), etc.

Appendix C: Population Health Research Unit

In addition to data held by the Nova Scotia Department of Health and related healthcare organizations, anonymous copies of the major databases have been made available for research purposes to the Population Health Research Unit (PHRU). This unit was established within Dalhousie University's Department of Community Health and Epidemiology in 1993 to meet the growing need for data and research support in population health, health services utilization, and their interrelationships. The Province of Nova Scotia has supplied PHRU with complete Medicare, Pharmacare and Discharge Abstract Database files suitable for research purposes. The Unit has also been supplied with Workers' Compensation records and has access to a variety of other data sources including clinical databases and large scale population surveys.

The individual databases have been linked to create a comprehensive data system which provides opportunities for research in the health and social sciences.

- Evaluation studies
- Needs assessments
- Cost-benefit and cost-effectiveness analyses
- Compliance studies
- Determinants of health studies
- Health status analyses
- Patterns of care and practice studies
- Service and technology utilization studies

Use of PHRU's services

To ensure fair and equitable access to the databases and to preserve the integrity and confidentiality of the data, a number of policies have been adopted. Researchers are required to submit a written request indicating the nature of the data requested, its intended use and the extent to which it will be shared with others. All users are required to sign a confidentiality agreement and all access is governed by the pricing policies of the Unit.

Staff within PHRU will provide expert services for data interpretation and explanation on a cost recovery basis. Microdata in the form of customized research files may be released to researchers upon approval of the PHRU Management Committee. All such data files will be rendered anonymous and subjected to special release conditions.

For more information contact:

Population Health Research Unit
Department of Community Health & Epidemiology
Faculty of Medicine
Dalhousie University
Halifax, Nova Scotia
B3H 4H7

Phone: (902) 494-3860
Fax: (902) 494-1597